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Client/Matter: 007874-0271790

REMARKS

Claims 1-4, and 6-53 are pending. By this Amendment, the specification is amended; claim 5 is canceled without prejudice or disclaimer; claims 1, 3, 8, 10, 11, 17, 22, 24 and 44-47 are amended. Claims 27-43 and 50-53 have been withdrawn from further consideration as drawn to a non-elected invention. The election was made with traverse.

Reconsideration in view of the above amendments and following remarks is respectfully requested.

Applicant submitted Information Disclosure Statements (IDS's) on January 5, March 26, November 29, and December 17, 2001. Applicant has not yet received the initialed, signed and dated PTO-1449's submitted with the four IDS's. The Examiner is respectfully requested to review each reference, initial each reference, sign and date the PTO-1449's and return copies of such with the next Office Action in accordance with MPEP §609.

Claims 8, 10, 11, 17, 22 and 24 were rejected under 35 U.S.C. §112, second paragraph. The claims have been amended in accordance with the suggestion of the Office Action. Reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph are respectfully requested.

Claim 45 was rejected under 35 U.S.C. §101. The claim has been amended in accordance with the suggestion of the Office Action. Reconsideration and withdrawal of the rejection under 35 U.S.C. §101 are respectfully requested.

Claims 1-14, 20-22 and 44-49 were rejected under 35 U.S.C. §103(a) over Takayama (U.S. Patent 6,332,133) in view of Stein et al. (U.S. Patent 5,826,241). The rejection is respectfully traversed.

Claim 3 has been amended to include the features of claim 5. As the Office Action references the rejection of claim 1 with respect to claim 3, the rejection of claim 1 will be addressed following the remarks to claim 3.

Claim 3, as amended to include the features of claim 5, recites that the processing unit synchronizes a communication to the billing terminal with a communication to the paying terminal, and the first communication unit transmits to the billing terminal a synchronization confirmation signal which indicates establishment of synchronization, when the billing terminal notifies the transaction identifying number to at least one of the paying terminal and the user of the paying terminal, and when the paying terminal transmits to the settlement apparatus the same transaction identifying number.

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The Office Action on pages 5-6 acknowledges that the combination of Takayama and Stein et al. does not disclose that the billing terminal supplies the transaction number to the paying entity for transmission to the settlement apparatus. The Office Action attempts to cure this deficiency by taking Official Notice that the "concept claimed is a variation of the old and well-known 'challenge-response' authentication technique." The Office Action concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Takayama to use the challenge-response authentication technique because this would provide a simple yet effective way to authenticate both parties to a transaction.

It is respectfully submitted that the taking of Official Notice fails to cure the deficiencies of the combination of Takayama and Stein et al. with respect to claim 3, as amended to include the features of, claim 5, because: 1) the facts which the Examiner has taken Official Notice of, and the example provided in support thereof, are not analogous to the claimed invention; 2) even assuming the facts of which the Examiner has taken Official Notice are capable of instant and unquestionable demonstration as being well-known, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to combine the references and the taking of Official Notice in the manner done by the Examiner; and/or 3) even assuming the facts of which the Examiner has taken Official Notice are capable of instant and unquestionable demonstration as being well-known, and even assuming that motivation or suggestion existed to combine the references with the taking of Official Notice as done by the Examiner, such a combination and taking of Official Notice would not result in the claimed invention.

With respect to the Examiner's conclusion that the "concept claimed is a variation of the old and well-known challenge-response 'authentication technique,' it is respectfully submitted that the Examiner's conclusion is a failure to consider the claimed invention as a whole and an attempt to distill the claimed invention down to its "gist" and/or "thrust" and a clear violation of PTO policy as set forth in MPEP §2141.02.

It is respectfully submitted that the Examiner's taking of Official Notice of the allegedly well-known "challenge-response" authentication technique, and in particular the example provided in support thereof, are non-analogous to the claimed invention as the example provided by the Examiner is neither in Applicant's field of endeavor, electronic settlement apparatus and systems, nor is it reasonably pertinent to the particular problems with which Applicant was faced and would not have logically commended itself to

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Applicant's attention in considering his particular problem. See MPEP §2141.01(a).

Applicant is not claiming a challenge-response authentication technique.

Accordingly, one of ordinary skill in the art would not have looked to such challenge-response authentication techniques, in particular, the example provided by the Examiner, in the consideration of his problem.

As recited in claim 3, the transaction identifying number is set up in the settlement apparatus and transmitted to the billing terminal. The transaction identifying number is further transmitted to the paying terminal from the billing terminal and the processing unit synchronizes a communication to the billing terminal with a communication to the paying terminal when the same transaction identifying number is transmitted from the paying terminal to the settlement apparatus. In other words, the transaction identifying number is not known to either the billing terminal or the paying terminal before they begin to communicate together and the settlement apparatus allows the billing terminal and the paying terminal to communicate safely with each other upon synchronization.

Challenge-response authentication techniques, on the other hand, use codes, such as the one used in the example provided by the Examiner, that are known and negotiated in advance among the communicators. Therefore, if these codes are known to other people, the system of challenge-response does not require synchronization for the parties to communicate and does not keep the safety of the communication.

It is respectfully submitted that there is no motivation or suggestion to combine Takayama and Stein et al. with the taking of Official Notice in the manner done by the Examiner. As discussed above, the claimed transaction identifying number is used to synchronize a communication to the billing terminal with a communication to the paying terminal when the same transaction identifying number is transmitted from the paying terminal to the settlement apparatus when neither the billing terminal nor the paying terminal knows the transaction identifying number prior to the start of communication. One of ordinary skill in the art would not have looked to challenge-response authentication techniques, in which both parties know the challenge and the response prior to the start of communication, to arrive at the claimed invention.

It is also respectfully submitted that the combination of Takayama and Stein et al. with the taking of Official Notice fails to include all the limitations of claim 3. In particular, it is respectfully noted that claim 3 recites that the processing units synchronizes a communication to the billing terminal with a communication to the paying terminal when the

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same transaction identifying number is transmitted from the paying terminal to the settlement apparatus. In a challenge-response authentication technique, in particular in the example provided by the Examiner, the communication is permitted when a challenge is confirmed with a proper response, wherein the challenge and the response are different. Accordingly, even assuming it would have been obvious to combine Takayama and Stein et al. with the taking of Official Notice in the manner alleged by the Examiner, such a combination would not include all the features of claim 3 and would not present a *prima facie* case of obviousness.

It is further respectfully submitted that in accordance with MPEP §2144.03 the Examiner provide documentary evidence in support of the conclusion that challenge-response authentication techniques are capable of instant and unquestionable demonstration as being well-known, in the event the examiner maintains the rejection.

Claims 4 and 5-14 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claim 3 and for the additional features recited therein.

Additionally, with respect to the taking of Official Notice against claims 8-10, 14 and 20-22, the undersigned respectfully requests that the Examiner provide documentary evidence in accordance with MPEP §2144.03 in the event that the rejections are maintained.

Claim 1 recites an electronic settlement system including a settlement apparatus that performs the settlement of a transaction by synchronizing a communication to the billing terminal with the communication to the paying terminal when the settlement apparatus sets up a transaction identifying number which identifies the transaction, when the billing terminal notifies the transaction identifying number to at least one of the paying terminal and a user of the paying terminal, and when the paying terminal transmits the same transaction identifying number to the settlement apparatus.

As discussed above, the Office Action acknowledges that the combination of Takayama and Stein et al. does not disclose the billing terminal supplying the transaction number to the paying entity for transmission to the settlement apparatus. As additionally discussed above, the taking of Official Notice fails to cure the deficiencies of the combination of Takayama and Stein et al. with respect to this feature and as such the combination does not present a *prima facie* case of obviousness against claim 1.

Claim 2 recites additional features of the invention and is allowable for the same reasons discussed above with respect to claim 1 and for the additional features recited therein.

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Claim 44 recites a recording medium which stores a program for a computer, communicating with a billing terminal performing billing of a transaction and with a paying terminal performing the paying of the transaction, the program including a processing module which prompts to perform a settlement processing of the transaction, the processing module sets up a transaction identifying number which identifies the transaction and the processing module synchronizing a communication to the billing terminal with a communication to the paying terminal when the billing terminal notifies the transaction identifying number to at least one of the paying terminal and the user of the paying terminal and when the paying terminal transmits the same transaction identifying number to the computer.

As discussed above, the Office Action acknowledges that the combination of Takayama and Stein et al. does not disclose or suggest a billing terminal notifying a transaction identifying number to at least one of a paying terminal and user of the paying terminal. As also discussed above, the taking of Official Notice fails to cure the deficiencies of the combination of Takayama and Stein et al. with respect to this feature. The combination of the Takayama and Stein et al. with the taking of Official Notice fails to present a *prima facie* case of obviousness.

Claim 45 recites a computer implemented method performed by a seller who intermediates a settlement of transaction while communicating with a demander who performs billing of a transaction and with a payer who performs paying of the transaction. The method includes notifying the transaction identifying number to the demander, notifying the transaction number from the demander to the payer, and performing a settlement processing of the transaction between the demander and the payer corresponding to each other by the transaction identifying number when the same transaction identifying number is notified from the payer to the seller.

As discussed above, the Office Action acknowledges that there is no disclosure or suggestion by Takayama or Stein et al. of notifying a transaction identifying number from a payer, or paying entity, to seller or settlement apparatus. As also discussed above, the taking of Official Notice fails to cure the deficiencies of the combination of Takayama and Stein et al. with respect to this feature and thus fails to present a *prima facie* case of obviousness.

Claim 46 recites a method of settlement using a settlement apparatus which performs the settlement of a transaction while communicating with a billing terminal which performs billing of a transaction and with a paying terminal performs paying of the transaction. The method includes transmitting a transaction identifying number from the billing terminal to the

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paying terminal and synchronizing a communication to the billing terminal with a communication to the paying terminal when the paying terminal transmits the transaction identifying number to the settlement apparatus.

As discussed above, the Office Action acknowledges that the combination of Takayama and Stein et al. does not include a billing terminal supplying a transaction identifying number to a paying terminal for transmission to a settlement apparatus. As a taking of Official Notice fails to cure this deficiency of the combination of Takayama and Stein et al., the combination fails to present a *prima facie* case of obviousness.

Claim 47 recites a settlement apparatus for settling a transaction while communicating with the billing terminal which performs billing of a transaction and with a paying terminal which performs paying of the transaction. The settlement apparatus includes a processing unit that synchronizes a communication to the billing terminal with a communication to the paying terminal and a first communication unit that transmits to the billing terminal a synchronization confirmation signal which indicates establishment of synchronization, when the billing terminal notifies the transaction identifying number to at least one of the paying terminal and a user of the paying terminal, and when the paying terminal transmits to the settlement apparatus the same transaction identifying number.

As the combination of Takayama and Stein et al. with the taking of Official Notice, fails to disclose or suggest a billing terminal that notifies a transaction identifying number to at least one of a paying terminal and the user of the paying terminal, and the paying terminal transmitting to the settlement apparatus the same transaction identifying number, the combination of Takayama and Stein et al. with the taking of Official Notice fails to present a *prima facie* case of obviousness.

Claims 48 and 49 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claim 47 and for the additional features recited therein.

Reconsideration and withdrawal of the rejection of claims 1-14, 20-22 and 44-49 are respectfully requested.

Claims 15-19 and 23-26 were rejected under 35 U.S.C. §103(a) over Takayama in view of Stein et al. and further in view of Holloway (U.S. Patent 5,604,802). The rejection is respectfully traversed.

Claims 15-19 and 23-26 recite additional features of the invention and allowable for the same reasons discussed with respect to claim 3 and for the additional features recited

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therein. In addition, it is also respectfully submitted that Holloway fails to cure the deficiencies of Takayama, Stein et al., and the taking of the Official Notice.


It is also respectfully requested that with respect to claim 19, the Examiner provide documentary evidence in support of the taking of Official Notice as required by MPEP §2144.03. It is also respectfully submitted that the rejection fails to present a *prima facie* case of obviousness as the combination fails to include all the limitations of the claim.

Reconsideration and withdrawal of the rejection of claims 15-19 and 23-26 are respectfully requested.

In view of the above amendments and remarks, Applicant respectfully submits that all the claims are allowable and that the entire application is in condition for allowance.

Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
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